Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method comprising:

administering, to a subject with cancer, a composition comprising at least one ligand for a pattern recognition receptor and a delivery vehicle comprising a liposome, wherein said liposome is a positively charged liposome; a negatively charged liposome; or a neutral liposome; and exposing said subject to radiation.

2. (Currently amended) The method of claim 1, wherein ~~a ligand for~~ a said pattern recognition receptor comprises ~~a ligand for~~ a signaling pattern recognition receptor.

3. (Currently amended) The method of claim 2, wherein said signaling pattern recognition receptor comprises a mannan-binding lectin, a macrophage mannose receptor, a scavenger receptor, or at least one Toll-like receptor (TLR) selected from the group consisting of: ~~Toll-like receptors~~ TLR-1, TLR-2, TLR-3, TLR-4, TLR-5, TLR-6, TLR-7, TLR-8, TLR-9, TLR-10, TLR-11 and TLR-12~~, and mannan-binding lectins, and macrophage mannose receptor and scavenger receptors~~.

4. (Currently amended) The method of claim 3, wherein said ~~ligand~~ signaling pattern recognition receptor comprises ~~a ligand for~~ TLR-2, TLR-3 and/or TLR-9.

5. (Currently amended) The method of claim 1, wherein ~~a ligand for~~ a said pattern recognition receptor comprises ~~a ligand for~~ an endocytic pattern recognition receptor or a scavenger receptor or a mannose-binding receptor.

6. (Currently amended) The method of claim 1, wherein said administering step modulates ~~further comprising modulating~~ an immune response in said subject.

7. (Currently amended) The method of claim 6, wherein modulating said ~~an~~ immune response comprises augmenting ~~an~~ said immune response.

8. (Withdrawn) The method of claim 6, wherein modulating an immune response comprises down regulating an immune response.

9. (Canceled)

10. (Currently amended) The method of claim 1, wherein said cancer comprises one or more cancers selected from the group consisting of: lung cancer, skin cancer, liver cancer, bone marrow cancer, leukemia, ovarian cancer, breast cancer, prostate cancer, colon cancer, lymphoma, brain cancer, renal cell cancer, and cancer[[s]] of a mesenchymal tissue[[s]].

11-18. (Canceled)

19. (Withdrawn) The method of claim 6, wherein modulating an immune response comprises modulating an immune response in a subject disposed of a disease due to abnormal production of proteins in the body.

20-30. (Canceled)

31. (Currently amended) A method of inducing an immune response in a subject with cancer and exposed to radiation comprising: ~~The method of claim 1 wherein said composition comprises:~~

administering to said subject a composition comprising a ligand for ~~the~~ a pattern recognition molecule family of receptors; and

a delivery vehicle comprising a liposome, wherein said liposome is a positively charged liposome; a negatively charged liposome; or a neutral liposome; wherein said ligand is complexed to or within the delivery vehicle, and wherein administrating said composition ~~is capable of inducing an~~ induces said immune response in [[a]] said subject.

32. (Currently amended) The method of claim 31, wherein inducing ~~an~~ said immune response comprises inducing an innate immune response.

33. (Currently amended) The method of claim 32, wherein the innate immune response comprises ~~an innate immune~~ a response by macrophages, neutrophils, natural killer (NK) ~~NK~~ cells, ~~and/~~or dendritic cells, or any combination thereof.

34. (Currently amended) The method of claim 31, wherein said liposome ~~the delivery vehicle~~ comprises a positively or negatively charged liposome.

35. (Currently amended) The method of claim 31 [[~~34~~]], wherein the ratio of liposome to ligand comprises about 1:1 to about 100:1mmol liposome to mg ligand.

36. (Currently amended) The method of claim 31 [[~~34~~]], wherein said ratio of liposomes to ligand is about 16:1 or about 8:1mmol liposome to mg ligand.

37. (Canceled)

38. (Currently amended) The method of claim 31, wherein said liposome comprises a neutral liposome ~~delivery vehicle comprises any combination of liposomes~~.

39. (Currently amended) The method of claim [[~~37~~]] 34, wherein said positively charged liposome is complexed to said [[a]] ligand for the pattern recognition molecule family of receptors.

40. (Currently amended) The method of claim [[~~34~~]] 31, wherein said liposome consists of a mixture of charged and neutral lipids of DOTIM (1-(2-(oleoyloxy)ethyl)-2-oleyl-3-(2-hydroxyethyl)imidazolinium) and cholesterol in a 1:1 molar ratio.

41. (Canceled)

42. (Currently amended) The method of claim 31 [[~~41~~]], wherein the ~~non-liposomal~~ delivery vehicle further comprises at least one ~~vehicle~~ component selected from the group consisting of: polypeptides, polyamines, chitosan, PEI, polyglutamic acid, protamine sulfate, and microspheres.

43. (Currently amended) The method of claim 34, wherein said ligand comprises a toll like receptor (TLR) ~~TLR~~ ligand.

44. (Previously presented) The method of claim 43, wherein the TLR ligand comprises a nucleic acid molecule.

45. (Currently amended) The method of claim 43 [[44]], wherein said TLR ligand comprises a nucleic acid molecule ~~is~~ from a bacterium.

46. (Canceled)

47. (Previously presented) The method of claim 43, wherein the TLR ligand comprises a nucleic acid molecule from a fungal organism.

48-49. (Canceled)

50. (Previously presented) The method of claim 43, wherein the TLR ligand comprises a nucleic acid molecule from a multicellular organism.

51. (Previously presented) The method of claim 43, wherein the TLR ligand comprises a nucleic acid molecule from a unicellular organism.

52. (Currently amended) The method of claim 34 [[~~31~~]], wherein said ligand comprises at least one of a glycoprotein, lipoprotein, glycolipid, carbohydrate, lipid, nucleic acid and/or protein or peptide sequence derived from any portion of a bacterial pathogen.

53-54. (Canceled)

55. (Previously presented) The method of claim 31, wherein said ligand comprises a glycoprotein, lipoprotein, glycolipid, carbohydrate, lipid, nucleic acid and/or protein or peptide sequence derived from any portion of a fungal organism.

56. (Previously presented) The method of claim 31, wherein the ligand comprises a glycoprotein, lipoprotein, glycolipid, carbohydrate, lipid, nucleic acid and and/or protein or peptide sequence derived from any portion of a viral organism.

57. (Previously presented) The method of claim 31, wherein the ligand comprises a glycoprotein, lipoprotein, glycolipid, carbohydrate, lipid, nucleic acid and and/or protein or peptide sequence derived from any portion of a rickettsial organism.

58. (Previously presented) The method of claim 31, wherein the ligand comprises a glycoprotein, lipoprotein, glycolipid, carbohydrate, lipid, nucleic acid and and/or protein or peptide sequence derived from any portion of a parasitic organism.

59. (Previously presented) The method of claim 31, wherein the ligand comprises a glycoprotein, lipoprotein, glycolipid, carbohydrate, lipid, nucleic acid and and/or protein or peptide sequence derived from any portion of an arthropod organism.

60. (Previously presented) The method of claim 31, wherein said ligand comprises a nucleic acid encoding a TLR ligand.

61. (Currently amended) The method of claim 60, wherein said nucleic acid comprises at least one molecule selected from the group consisting of: ~~bacterial DNA,~~ eukaryotic DNA, eukaryotic dsDNA, eukaryotic ssDNA, a synthetic oligonucleotide, eukaryotic RNA, and synthetic RNA.

62. (Previously presented) The method of claim 61, wherein said oligonucleotide comprises at least one of poly I:C or related poly I:C oligonucleotides.

63. (Previously presented) The method of claim 31, wherein said ligand is a mixture of two or more different TLR ligands in ratios sufficient for eliciting an immune response.

64. (Previously presented) The method of claim 31, wherein said ligand consists of any molecule that associates with and/or stimulates a pattern recognition receptor.

65. (Previously presented) The method of claim 31, wherein said ligand comprises a synthetically generated ligand that binds to and stimulates a pattern recognition receptor.

66. (Currently amended) The method of claim 31, wherein said composition further comprises ~~comprising~~ a molecule with a steroid backbone.

67. (Currently amended) The method of claim 60, wherein said composition further comprises ~~comprising~~ a DNA condensing agent.

68. (Previously presented) The method of claim 67, wherein the DNA condensing agent is polyethylenimine (PEl).

69-84. (Canceled)

85. (Previously presented) The method of claim 1, wherein said administering comprises delivery by a route selected from intravenously, intraperitoneally, by inhalation, subcutaneously, intradermally, intranodally, intramuscularly, intranasally, orally, rectally, intravaginally, intravesicularly, intraocularly, and topically.

86. (Currently amended) The method of claim 1, further comprising augmenting an immune response in a subject ~~disposed of~~ having cancer.

87. (Currently amended) The method of claim 86, wherein the cancer comprises at least one cancer selected from the group consisting of: lung cancer, skin cancer,

liver cancer, bone marrow cancer, ovarian cancer, breast cancer, prostate cancer, colon cancer, lymphoma, brain cancer, renal cell cancer, and cancers of mesenchymal tissues.

88-111. (Canceled)

112. (Currently amended) A method of treating a cancer in a subject in need of treatment for said cancer ~~with cancer~~ comprising:

administering to said subject a composition comprising at least one ligand for a pattern recognition receptor and a delivery vehicle comprising a liposome, wherein said liposome is a positively charged liposome; a negatively charged liposome; or a neutral liposome~~,~~ ~~in conjunction with~~; and administering to said subject a radiation therapy wherein said ~~method elicits a response in a subject disposed of cancer~~ composition elicits an immune response in said subject, thereby treating said cancer in said subject.

113. (Currently amended) The method of claim 112, further comprising administering at least one additional therapy selected from the group consisting of: hyperthermia therapy, chemotherapy, photodynamic therapy (PDT), surgery, ultrasound, and focused ultrasound.

114. (Currently amended) The method of claim 112, wherein the order of administering the radiation therapy generates different responses.

115. (Currently amended) The method of claim 112 [[~~114~~]], wherein said radiation therapy is administered to said subject before administering said composition ~~introduced first~~.

116. (Currently amended) The method of claim 112 [[~~114~~]], wherein said radiation therapy is administered to said subject after administering said composition ~~introduced last~~.

117. (Currently amended) The method of claim 112 [[~~114~~]], wherein said radiation therapy is ~~introduced~~ administered to said subject concurrently with the administration of said composition.

118. (Original) The method of claim 112, wherein the pattern recognition receptor ligand comprises a nucleic acid molecule.

119. (Original) The method of claim 112, wherein the pattern recognition receptor ligand comprises bacterial DNA.

120. (Currently amended) The method of claim 112, wherein the delivery vehicle comprises a charged liposome.

121. (Currently amended) The method of claim 112, wherein the delivery vehicle comprises a neutral liposome ~~non-liposomal delivery vehicle~~.

122-150. (Canceled)

151. (Canceled)

152. (Currently amended) The method of claim 1, wherein the order of administering the radiation therapy generates different responses.

153. (Currently amended) The method of claim 1 ~~152~~, wherein the radiation ~~exposure~~ is administered before said composition ~~occurs first~~.

154. (Currently amended) The method of claim 1 ~~152~~, wherein the radiation ~~exposure~~ is administered after said composition ~~occurs last~~.

155. (Currently amended) The method of claim 1 ~~152~~, wherein the radiation ~~exposure~~ is administered concurrently ~~concurrent~~ with said composition ~~administering~~.

156. (Previously presented) The method of claim 1, wherein the ligand comprises a synthetic compound capable of binding a pattern recognition receptor.

157. (Withdrawn) The method of claim 156, wherein the synthetic compound comprises immadazoquinoline.